

Work Order ID 74303

Wednesday, September 28, 2011 11:00:35 A

Page 1

Item ID: D4092-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Maintenance Step

Start Date: 9/28/2011 Start Qty: 20.00

Cust Item ID:

Required Date: 10/14/2011 Req'd Qty: 20.00

Customer:

Reference:

Approvals:

Process Plan: M.L.J

Date: 9/29/11

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4092

B

100

Cut blanks as per folio

0.00

Bandsaw

Memo

0.00

F.K. 11/10/04

21
25

Ø

Jeaspa Bandsaw

110

0.00

HAAS I

Memo

0.00

F.K. 11/10/05

21
25

Ø

HAAS CNC vertical machine #1

Mill as per Dwg and Folio FA935

Dwg Rev: B

Folio rev: A

Deburr

PTO →

W/O: 74303

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4092-1 PAR #: N/A Fault Category: Machining NCR: Yes ☒ No ☐ DQA: 11 Date: 11.10.18
 11-900 Resolution: use-as-is Disposition: use-as-is QA: N/C Closed: 11/10/18 Date: 11/10/18

NCR: WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/10/18	110	Part was slightly bent so the grip not turn out the way that it was suppose to. R-L Process	<u>MD</u> 11/10/18 <u>DSI</u> <u>our</u>	Will check the other parts to make sure they're not bent. ACCEPTABLE ONLY AFFECTS APPEARANCE NOT STRUCTURAL.	11/10 11/10/18	<u>S</u> 11/10/18	<u>MD</u> 11/10/18	<u>S</u> 11/10/18

NOTE: Date & initial all entries

Work Order ID 74303



Page 2

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Item Name: Maintenance Step

Start Date: 9/28/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 10/14/2011 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

KK 11/10/05

21

φ

Quality Control

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

B.A 11/10/06

21

φ

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

21 BR 11-10-7.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Work Order ID 74303

Wednesday, September 28, 2011 11:00:35 A

Page 3

Item ID: D4092-1

Accept

Setup Start

Revision ID:

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Start Date: 9/28/2011 Start Qty: 20.00

Cust Item ID:

Required Date: 10/14/2011 Req'd Qty: 20.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

N/A 11-10-11

155

Wing Walk as per dwg QSI005 4.4 Batch M118988

0.00



HandFinish

Memo

0.00

Hand Finishing

x21 of 21 11/10/12

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

11 10 13 (21)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Picklist Print

Wednesday, September 28, 2011 11:00:32 AM

Page 1

Work Order ID: 74303

Parent Item: D4092-1

Parent Item Name: Maintenance Step



Start Date: 9/28/2011

Required Date: 10/14/2011

Start Qty: 20.00

Required Qty: 20.00

Comments: Ipp Rev:A New Issue 10-05-31 JLM Verified By:DD IPP
REV:B AS PER ECN 11-639 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2761-108		Manufactured	No			100	f	198.0000	2.5	52.63158			
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Extrusion (HPK)



FK- 11/10/06.

Location

Loc Qty

Loc Code

MAT007

198

✓ 8323

198

53.1562 ft

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 74303-
Description: Maintenance Step	Part Number: D4092-1
Inspection Dwg: D4092- Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

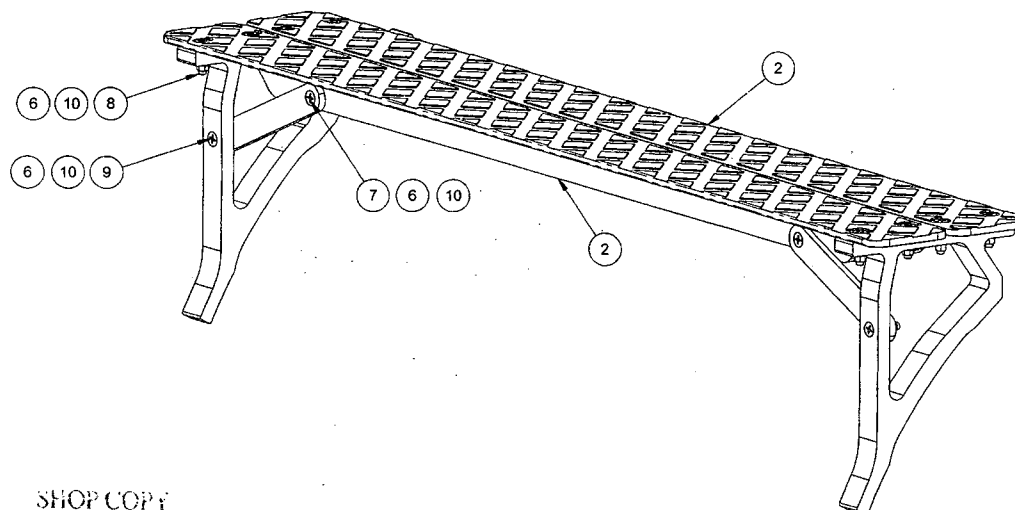
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
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2.50	+/- .030	2.501	✓		"	
1.25	+/- .030	1.25	✓		"	
1.38	+/- .030	1.377	✓		"	
.19	+/- .030	.185	✓		"	
R0.25	+/- .010	.25	✓		rad gauge	
.25	+/- .030	.245	✓		FK-04 Vern	
4.78	+/- .030	4.78	✓		"	
R.50	+/- .010	.50	✓		rad gauge	
1.69	+/- .030	1.69	✓		FK-04 Vern	
.30	+/- .030	.30	✓		"	
45°	+/- .5°	45°	✓		angle gauge	
.030	+/- .030	.031	✓		FK-04 Vern	
.20	+/- .020	.199	✓		"	
Ø .201	+/- .005	.201	✓		"	
1.25	+/- .030	1.250	✓		"	
.50	+/- .030	.498	✓		"	
1.500	+/- .010	1.500	✓		"	
.38 Typ	+/- .030	.375	✓		"	
.69 Typ	+/- .030	.685	✓		"	
C'sink Ø.390 x 100	+/- .010	.390 x 100	✓		"	
Ø .50 x .05 Deep	+/- .010	.50 x .035	✓		"	

Measured by: K.R.	Audited by: K.A.	Preliminary Approval:
Date: 11/10/05	Date: 11/10/06	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

ITEM	QTY -041	PART NUMBER	DESCRIPTION
1	X	D4092-041	MAINTENANCE STEP ASSEMBLY
2	2	D4092-1	MAINTENANCE STEP
3	1	D4093-1	BRACKET
4	1	D4093-3	BRACKET
5	2	D4093-5	BRACE
6	12	MS21042L3	NUT
7	2	MS24694-S54	SCREW
8	8	MS24694-S55	SCREW
9	2	MS24694-S56	SCREW
10	12	NAS1149D0332J	WASHER



NO. _____
 WITHOUT NOTICE
 WORK ORDER
 SUBJECT TO AMENDMENT
 UNCONTROLLED COPY
 ENGINEERING
 RETURN TO
 SHOP COPY

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 74303

M.L. J
 9/29/11

D4092-041 MAINTENANCE STEP ASSEMBLY



RELEASED
 2011-09-22

B	REDRAWN; LOWERED FOR AESTHETICS	RF	11.07.27
A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4092	SHEET 1 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	MAINTENANCE STEP ASS'Y	NTS
DATE	11.07.27	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

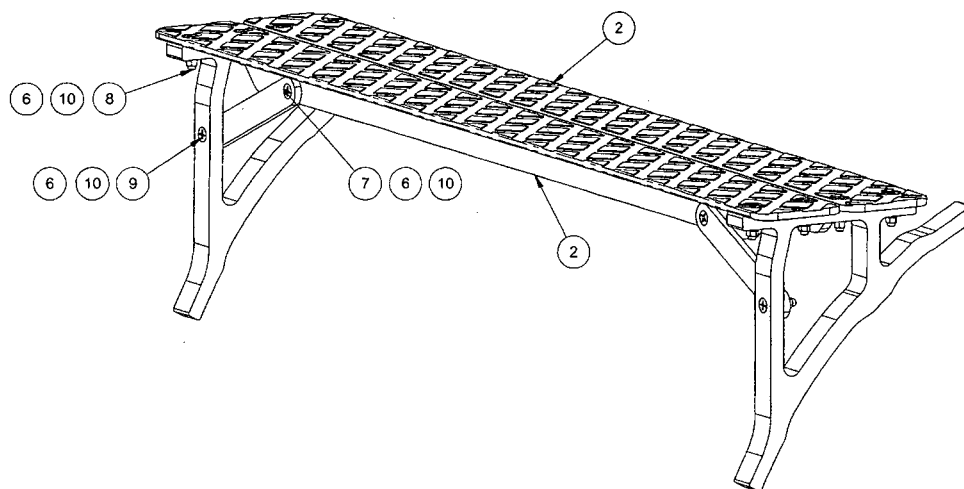
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74303



D4092-042 MAINTENANCE STEP ASSEMBLY



ITEM	QTY -042	P/N	DESCRIPTION
1	X	D4092-042	MAINTENANCE STEP ASSEMBLY
2	2	D4092-1	MAINTENANCE STEP
3	1	D4093-1	BRACKET
4	1	D4093-3	BRACKET
5	2	D4093-5	BRACKET
6	12	MS21042L3	NUT
7	2	MS24694-S54	SCREW
8	8	MS24694-S55	SCREW
9	2	MS24694-S56	SCREW
10	12	NAS1149D0332J	WASHER

RELEASED
2011-09-22
JUN

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	KENT, WA	
CHECKED	140	DRAWING NO.	REV. B
MFG. APPR.	91	D4092	SHEET 2 OF 6
APPROVED	140	TITLE	SCALE
DE APPR.	#	MAINTENANCE STEP ASS'Y	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

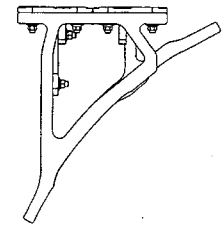
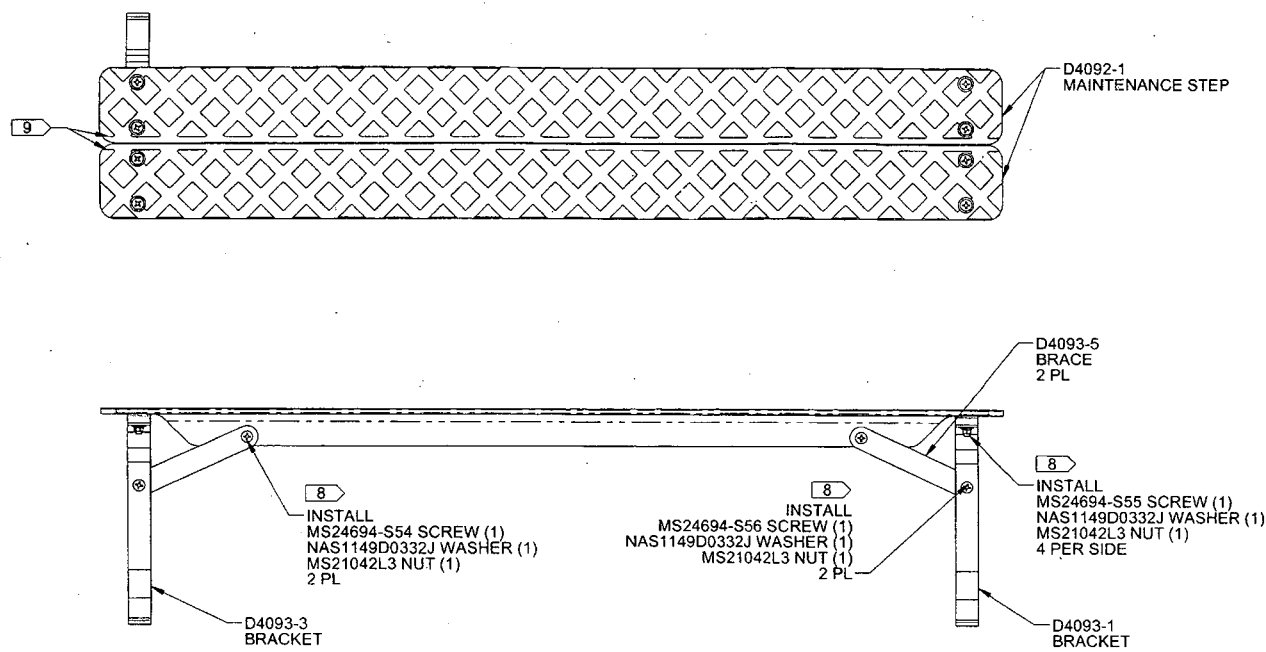
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74303



D4092-041 MAINTENANCE STEP ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 5.37 lbs
- 8) TORQUE SCREWS UP TO 15-25 in-lb (1.7-2.8 N-m)
- 9) GRIP CUTOUT TOWARD CENTER

RELEASED
2011-09-22

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	KENT, WA	
CHECKED	140	DRAWING NO.	REV. B
MFG. APPR.	21	D4092	SHEET 3 OF 6
APPROVED	140	TITLE	SCALE
DE APPR.	140	MAINTENANCE STEP ASS'Y	NTS
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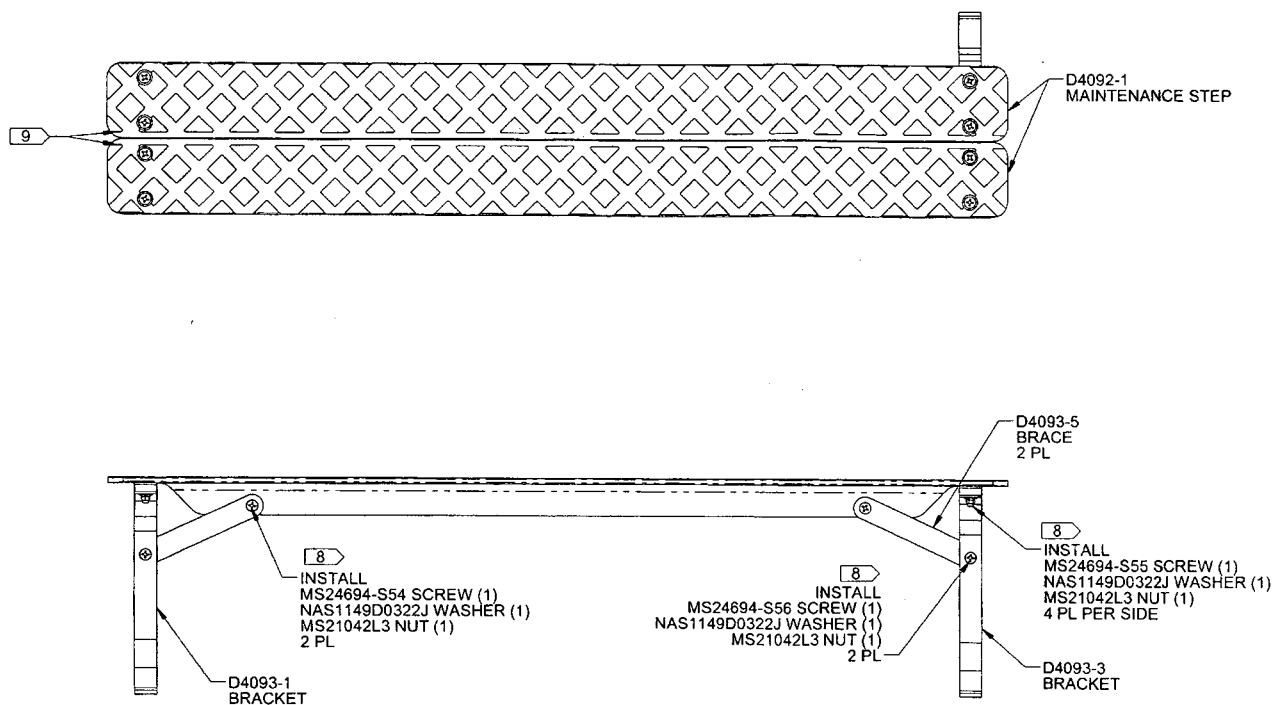
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74303

**D4092-042 MAINTENANCE STEP ASSEMBLY****NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 5.37 lbs
- 8) TORQUE SCREWS UP TO 15-25 in-lb (1.7-2.8 N-m)
- 9) GRIP CUTOUT TOWARD CENTER

RELEASED
 2011-09-22
 MW

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	KENT, WA	
CHECKED	140	DRAWING NO.	REV. 8
MFG. APPR.	21	D4092	SHEET 4 OF 6
APPROVED	140	TITLE	SCALE
DE APPR.	140	MAINTENANCE STEP ASS'Y	NTS
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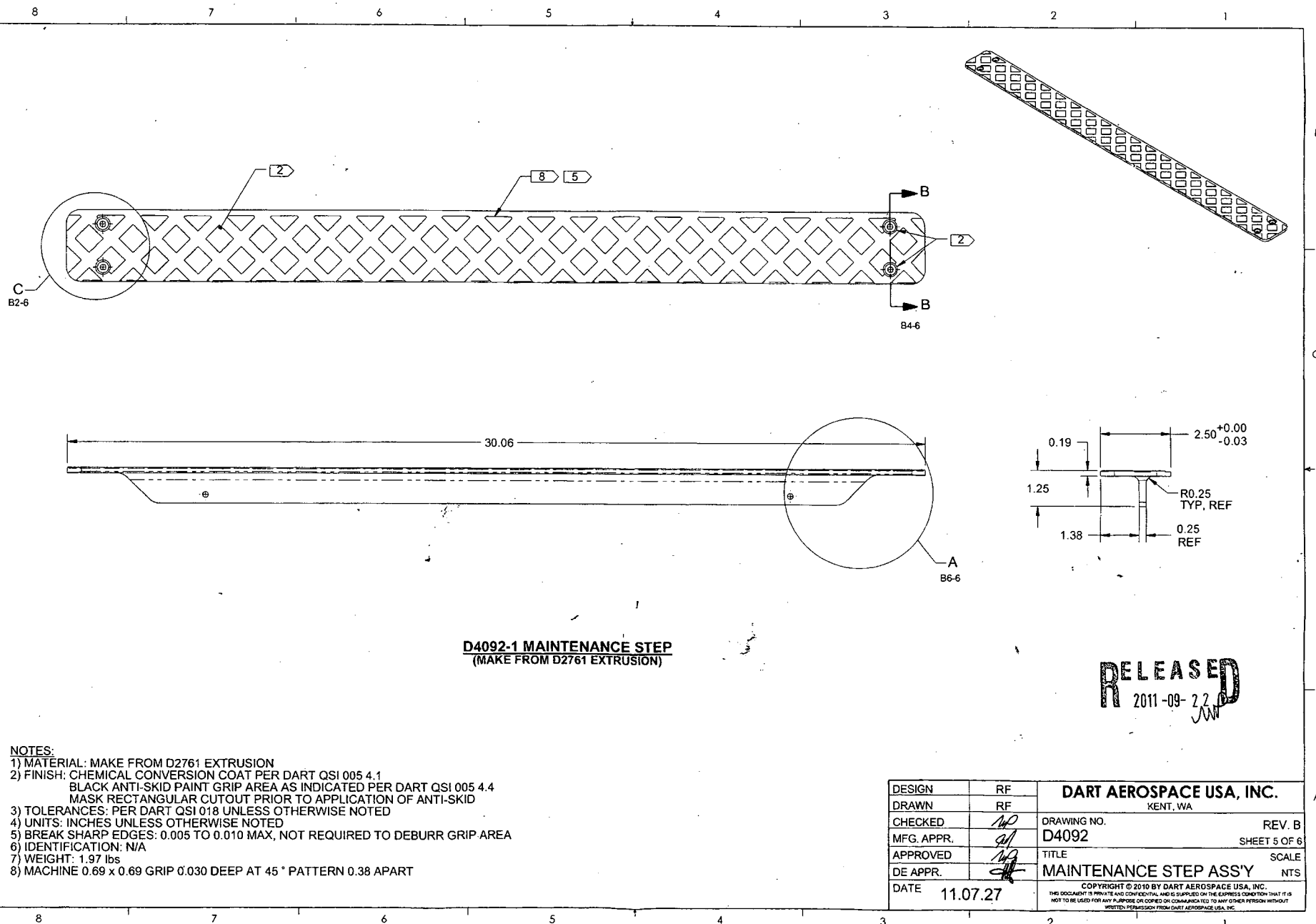
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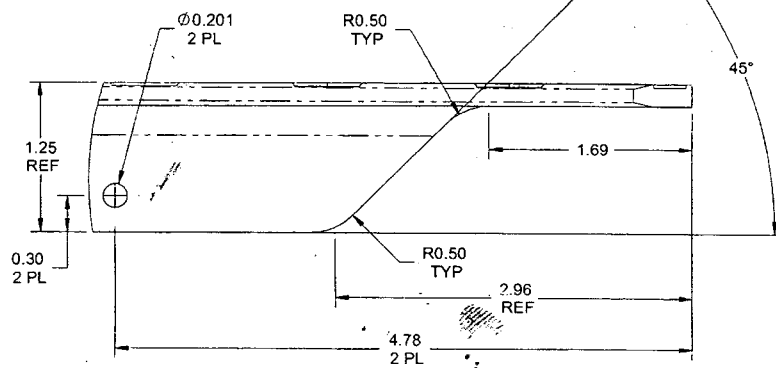
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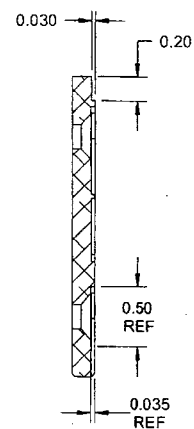
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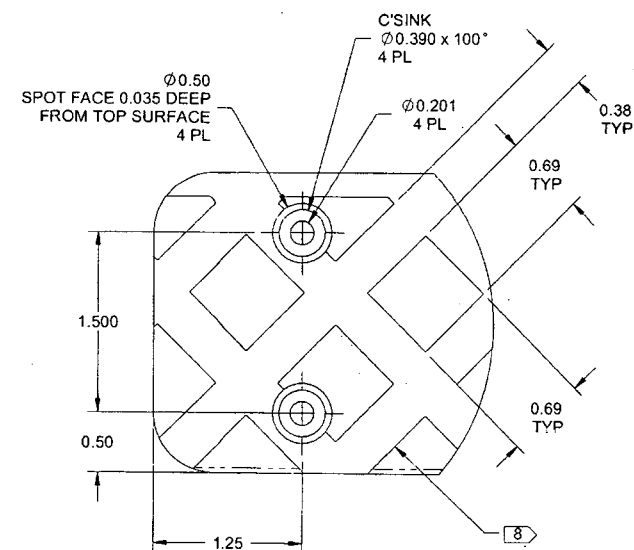
74303



DETAIL A B3-5
SCALE 3X, TYP



SECTION B-B C3-5
SCALE 3X, TYP



DETAIL C C8-5
SCALE 3X, TYP

RELEASED
2011-09-22

DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	RF		
CHECKED	<i>RF</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>RF</i>	D4092	SHEET 6 OF 6
APPROVED	<i>RF</i>	TITLE	SCALE
DE APPR.	<i>RF</i>	MAINTENANCE STEP ASS'Y	NTS
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